

**HOLDFAST® GORILLA NAILPOWER PRO CLICK N FIX**  
BRANZ Appraisal Certificate No 440 (2005)  
**MATERIAL SAFETY DATA SHEET**

**1. Identification of the Substance/Preparation**

**1.1 Identification of the substance or preparation:**

**1.1.1 Product Name:** HOLDFAST® Gorilla Nailpower® PRO Click N Fix

**1.1.2 Identification of Product:**

*Use:* Filling, fixing and insulation  
*Chemical Nature:* Preparation of propellant and isocyanatourethan prepolymer



**1.2 Product Code:**  
20088(750ml aerosol)

**1.3 Description:**

Gorilla Nailpower Pro Click N Fix Construction Adhesive is a one-component, self-expanding, ready to use polyurethane foam.

**2. Composition/Information on Ingredients**

	CAS - Nr	Conc.	Symbol	R-phrases
Propellant Mixutre	n.a	10-20%	F	13
Trichloropropyl-phosphate	13674-84-5	10-20%	Xi	36/38
Diphenylmethane-4,4' - diisocyanate	101-68-8	5-10%	Xn	20-36/37/38-42

**3. Hazards Identification**

- Harmful by inhalation and ingestion.
- Extremely flammable
- Danger for bursting if heated by increase on inner pressure.
- If not used in a ventilated area formation of explosive gas-air mixture is possible.

**4. First Aid Measures**

**General**

In case of doubt or with persisting symptoms, obtain medical attention.  
Never pass anything through the mouth of a unconscious person

**4.1 Swallowed:**

Never give water to an unconscious person. Do not induce vomiting. Seek medical advice.

**4.2 Eye contact:**

Rinse immediately with plenty of water Seek medical advice.

#### **4.3 Skin Absorption:**

Rinse immediately with plenty of water. If irritation persists seek medical advice.

#### **4.4 Inhalation:**

Remove the victim into fresh air Seek medical advice.

### **5. Fire-Fighting Measures**

#### **5.1 Fire extinguishing media:**

Waterjet, Foam, Powder

#### **5.2 Special exposure hazards:**

In case of fire, carbonmonoxide, nitrogenoxides, isocyanate vapours and traces of cyanides may be formed.

#### **5.3 Special protective equipment for fire-fighters:**

Firefighters should wear self contained breathing apparatus.

#### **5.4 Instructions:**

Cool closed containers with water if they are exposed to fire

Dilute toxic gases with water spray

Do not move the load if exposed to heat

### **6. Accidental Release Measures**

CAUTION – spillages may be slippery.

#### **6.1 Methods for cleaning up:**

- Absorb spillages onto sand, earth or any suitable absorbent material.
- Transfer to a container for disposal.
- Do not allow to enter drains, sewers or watercourses.
- Spilled material will polymerise under atmospheric moisture.
- Use appropriate containment to avoid environmental contamination
- Allow product to solidify and remove it by mechanical means.
- Remove uncured foam with acetone.

### **7. Handling and Storage**

#### **7.1 Handling:**

- Keep containers dry and closed in a well ventilated area.
- Prevent contact with skin and eyes.
- Keep away from Foodstuffs.
- Observe very strict hygiene
- Use spark/ explosion proof appliances and lighting system
- Wash hands thoroughly before breaks and at the end of the working day.

#### **7.2 Storage:**

- Store in a cool and well ventilated place in the original containers.
- Keep out of direct sunlight
- Keep away from any heat sources, ignition source, no smoking, acids, bases, amines.
- Storage temperature between +5°C and +25°C.
- Fireproof storeroom
- Storage life: 365 days

### 7.3 Specific Uses:

- See information supplied by the manufacturer

## 8. Exposure Controls/Personal Protection

### 8.1 Personal Protection

#### 8.1.1 Respiratory Protection

- Breathing mask in bad ventilation areas

#### 8.1.2 Eye and Skin Protection:

- Protective Gloves.
- Safety Goggles

### 8.2 Industrial hygiene:

- Wash hands before breaks and at the end of the working day.
- Observe the usual protective measures for manipulation of chemical substances.
- Spray is to be held away from the body.
- Do not inhale spray.
- Change clothes after spillages

## 9. Physical and Chemical Properties

<i>Base:</i>	Polyurethane
<i>Consistency:</i>	stable foam
<i>Foam Character:</i>	thixotropic, does not slump
<i>Curing System:</i>	moisture cure
<i>Skin Formation:</i>	10 minutes at 20°C/65% RH
<i>Curing Rate:</i>	3 hours for a 50mm bead
<i>Shrinkage:</i>	none
<i>Drying Time:</i>	Dust free after 20-25 minutes
<i>Temperature Resistance:</i>	-40°C until +100°C (cured)
<i>Foam Yield:</i>	1000ml yields 35-40lt foam
<i>Post Expansion:</i>	none
<i>Cellular Structure:</i>	ca.80% closed cells
<i>Maximum tension:</i>	ca 15N/cm <sup>2</sup>
<i>Specific Gravity:</i>	ca.21-25kg/m <sup>2</sup> (extruded)
<i>Vapour Permeability:</i>	70g/m <sup>2</sup> /24h (DIN 53429)
<i>Water absorption:</i>	0.4% Vol. (DIN 53429)
<i>Fire Class:</i>	B3 (DIN 4102 part 2)
<i>Acoustic rating:</i>	57Db (din 52210-PART 3) "Institut fur Fenstertechnik, Rosenheim' Germany
<i>Insulation Factor:</i>	(0.032 Kcal/m.hoC (lambda) (0.032 Kcal/m.hoC (lambda) European standard (NZ Standard R-Value) = 100mm wall R VALUE 3.12
<i>HSNO Classification:</i>	6.1D (inhalation), 6.3A, 6.4A, 6.5A

## 10. Stability and Reactivity

### 10.1 Conditions to avoid/reactivity

- Stable under normal conditions

## 10.2 Materials to avoid:

- None

## 10.3 Hazardous decomposition products:

- On burning: release of e.g. carbon monoxide, carbon dioxide and formation of small quantities of hydrogenchloride

## 11. Toxicological Information

Sensitivity by inhalation is possible.

MDI-value, measured in use = < 0.05%

Many years of experience have not shown any dangers for health, if properly used and under the usual industrial hygiene, nor have any indications of damages for health been presented to us.

### 11.1 Acute Toxicity:

Polymethylenepolyphenylisocyanate: LD50 oral rat: >10000 mg/kg

LD50 dermal rabbit: >5000 mg/kg

Propane:

LC50 inhalation rat: 513 mg/1/4 h

LC50 inhalation rat: 280000 ppm/4 h

Dimethyl ether:

LC50 inhalation rat: >50 mg/1/4 h

### 11.2 Chronic Toxicity:

Polymethylenepolyphenylisocyanate: Carcinogenicity (MAK): 3B

IARC classification: 3

Dimethyl ether:

Teratogenicity (MAK): D

### 11.3 Acute effects/symptoms (upon overexposure):

After Inhalation:

Dry/sore throat

Coughing

Irritation of the respiratory tract

Irritation of the nasal mucous membranes

Runny nose

Following symptoms may appear later: Inflammation of the respiratory tract, risk of lung odema, respiratory difficulties.

After Skin Contact:

Tingling/ irritation of the skin

After Eye Contact:

Irritation of the eye tissue

Lacrimation

### 11.4 Chronic effects:

May cause sensitisation by skin contact

May cause sensitisation by inhalation

Not listed in carcinogenicity class (IARC, EC, TLV, MAK)

Not classified as toxic to reproduction (EC)

Not listed in mutagenicity class (EC, MAK)

On continuous exposure/contact:

Feeling of weakness, itching, skin rash/inflammation, may stain the skin, dry skin, coughing, inflammation to the respiratory tract, respiratory difficulties.

## 12. Ecological Information

### 12.1 Ecotoxicity:

- No data available

### 12.2 Mobility:

**Volatile organic compounds (VOC):** 23%

- Insoluble in water

For other physicochemical properties see section 9

### 12.3 Persistence and degradability:

Biodegradation BOD – ND %ThoD  
Water: No data available  
Soil: T ½: ND days

### 12.4 Bioaccumulative potential:

1og Pow – ND  
BCF – ND

### 12.5 Other adverse effects:

- **WGK** WGK: (Classification in compliance with  
Vertwaltungsvorschrift  
wassergefährdenderstoffe (VwVwS) of 17  
May 1999)

- **Effect on the ozone layer** : Not dangerous for the ozone layer (1999/45/EC)

- **Greenhouse effect** : no data available

- **Effect on waster water purification** : no data available

Do not allow to enter drains, sewers or watercourses.  
Biologically not degradable.

## 13. Disposal Considerations

Do not discharge into drains or the environment; dispose to an authorised water collection point.  
Disposal should be in accordance with local, state or national legalisation.

## 14. Transport Information

Not considered as 'dangerous goods'.

ADR/RID: Class 2 Transport Name AEROSOL  
Classification code: 5 F  
Rn 2201  
Package labelling AEROSOL  
Danger labels packages: 2.1

ADNR: Class 2  
Classification code: 5 F  
Danger labels packages: 2.1

IMDG: Class 2 UN-nr 1950  
Proper shipping name: aerosol  
Label aerosol Pg: 2102  
Marine Pollutant: no  
Ems-nr. 2-13 MFAG-Tafel 620

ICAO Class 2.1 UN-nr 1950  
Pkg Gp III  
Proper Shipping Name: aerosols non flammable  
Shipping instructions: Cargo 203  
Passenger 203 / Y203

## 15. Regulatory Information

Labelling in accordance with directive 67/548/EEC and 1999/45/EC.

Symbols: Xn – Harmful  
F – Extremely Harmful

Contains: Polymethylenepolyphethylisocyanate

R-phrases : 20/36/37/38/42/43

R20: Harmful by inhalation

R36/37/38: Irritating to eyes, respiratory system and skin.

R42/43: May cause sensitization by inhalation and skin contact.

S-phrases: 23/26/28/36/37/39/45/38/51/63

S23: Do not breathe spray

S26: In case of contact with eyes, rinse immediately with plenty of water and seek medical attention.

S28: After contact with skin wash immediately with plenty of water and soap.

S36/37/39: Wear suitable protective clothing gloves, and eye/ face protection.

S45: In case of accident or if you feel unwell, seek medical advice.

S38: In case of insufficient ventilation, wear suitable respiratory equipment.

S51: Use only in well ventilated area

S(63): (In case of accident by inhalation: remove casualty to fresh air and keep at rest)

Other: Pressurised container. Protect from sunlight and do not expose to temperatures exceeding 50°C. Do not pierce or burn, even after use. Do not spray on a naked flame or any incandescent material. Keep away from sources of ignition – NO SMOKING. Keep out of reach of children. Without adequate ventilation formation of explosive mixtures may be possible.  
Tactile warning label required.  
P91: Contains isocyanates: see information supplied by the manufacturer.

## 16. Other Information

Test pressure for used cans: 15 bar.

The information in this Material Safety Data Sheet is based on the knowledge at the issue date and in accordance with national law and EC-regulations. Without written instructions for use, the product may not be used for purposes, other than those specified.

The information in this sheet is meant as a description of safety measures for this product, is not meant as a warranty for quality regarding the technical specifications. The information in this data sheet is prepared in accordance with Directives 91/155/EC and 88/379/EC.

### Health and Safety Recommendation

– Apply the usual industrial hygiene

**Last Updated:** 10<sup>th</sup> July 2008